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"RALEIGH AMATEUR RADIO SOCIETY NEWS"

FEBRUARY 1977 ISSUE 88

"HAMS DO IT WITH MORE FREQUENCIES!!!"

If you're interested in getting into Ham Radio, now's your chance. The Raleigh Amateur Radio Society is sponsoring a novice class starting in February at the community center in Lions Park.

There is no charge for the class and no entrance requirements. The only fees involved will be for material that the students elect to purchase.

The intent of the class is to teach the code and theory necessary to qualify for the novice radio license. Advanced theory courses will be offered following this course.

If you are interested, come to the first session at the Lions Park Community Center on February 1st, that's a Tuesday, at 7:00 P.M. "Talk to the World" Become a ham and join the more than 300,000 licensed amateurs whoo "DO IT WITH MORE FREQUENCIES!!!"

MEET YOUR MEMBERS

HARRY C. AVINGER JR. WB4OWK

Harry Avinger most probably had never heard of Raleigh Amateur Radio Society in December 1971, but he was indirectly involved in one of the club's most ambitious projects.

Club members that year lined up a Christmas radio link with an Army base in Germany that enabled Governor Bob Scott to talk with North Carolina servicemen at the base. After he talked with the Tar Heels, the governor gave a brief countdown and a North Carolina child closed a switch to light the base Christmas tree.

Army MARS at Fort Bragg provided the radio link with a MARS station at the base in Germany. Harry was stationed with the Army in Germany at that time. He was Deputy MARS Director for the United States Army in Europe. He recalls being routinely informed of the project, though he was not stationed at the base the governor contacted.

Harry joined RARS in November 1976. He operates an ICOM IC-22A on two meters and a Heathkit SB-102. He likes voice and CW equally well.

Harry graduated from Clemson University in South Carolina in 1969 with a bachelor of science degree in electrical engineering. In January 1970 he joined the Army as a second lieutenant for

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a tour that took him and wife Jan to Germany for service with the Signal Corps. He was deputy MARS director during his second year there. His Army tour ended in April 1972.

Harry said Jan held a novice license when they went to Germany but it expired while they were there and "she never reapplied for a license. She just tolerates my hamming activities," he said.

Harry said he previously held the WA4CNO call but allowed it to lapse while he was in college. He received the WB4OWK call during his final semester at Clemson. He said he held the BA1AG call while in Germany.

"I don't know that I could really say why I'm a ham," Harry said. "I got started when I was 12 or 13 years old, and I've always been interested in it."

His most memorable event was a 1970 field day he spent with the radio club at Fort Monmouth, New Jersey. "That was my first field day," he said. "I got to take my wife along and we had a grand time."

Harry is control system supervisor at the A. J. Scale Energy Control Center on Hillsborough Street in Raleigh, a facility of Carolina Power and Light Company.

He and Jan have two children: Michael, five, and Katherine, two.

Harry was born March 25, 1947, at Orangeburg, South Carolina.

NEXT MEETING

Raleigh Amateur Radio Society meets Wednesday, February 2 at 7:30 p.m. in the community room at Crabtree Mall.

Visitors and prospective members are welcome. Would-be hams are encouraged to attend. The club conducts classes to enable interested persons to obtain their amateur radio license from the Federal Communications Commission.

Coffee and doughnuts are served during a break between the business and program sessions of the meeting.

Come and join the fellowship.

You never know who you're going to meet at a RARS meeting.

NEW MEMBERS AT 1/5/77 MEETING

1. James W. Langley WB4YYY, General Class, Route 2 Box 252-A Raleigh, N. C. 27609
2. Earle E. Arundel WA4NLV, Advanced Class, 7920 Hardwick Drive Raleigh, N. C. 27609
3. George H. Wilson WB4ZTG, Novice Class, 5608 Rangeley Drive Raleigh, N. C. 27609
4. David Dropkin WB4YIQ, Novice Class, 3111 Morningside Drive Raleigh, N. C. 27607
5. Edwin H. Patterson WA4PDP, Technician Class, 106 Pine Circle Smithfield, N. C. 27577
6. Donald R. Heppner WA4PLH, Novice Class, 3114 Westbury Drive Raleigh, N. C. 27607
7. Bruce Morgan WA4ODM, General Class, 204 North Street Zebulon, N. C. 27597

8. David Humphrey WB4YYT, Novice Class, 111 Neuse Drive Route 1 Knightdale, N. C. 27545

9. Clyde A. Douglass Jr. WA4YYP, Novice Class, 604 Colchester Drive Knightdale, N. C. 27545

10. Jim Depoy KØGTI, Technician Class, 726 North Harrison Cary, N. C. 27511

R. L. Rigdon

CONGRADULATIONS -- KEN RUDDER, WA4JJW

Ken Rudder, WA4JJW, has been advised by ARRL that his application for DXCC was approved. Congradulations.

A RUMOR ABOUT WAYNE SHEVLIN, WA4SNC????

There is a persistant rumor that Wayne Shevlin, WA4SNC, actually worked all fifty (50) states thereby completing his Bicentennial WAS!!!!!!!!!!!!!!!!!!

FOR SALE: Heath Kit HW-202 2-meter Xcvr with 5 sets of crystals, built-in scanner and touch tone jack. $185. WB4WVJ, Dick in Cary 467-0701.

RON OATES, WA4JWT, NEEDS ALASKA??

Ron Oates, WA4JWT, needed Alaska on 10 meters for a Bicentennial 5 Band WAS. At press time we had not heard whether or not he finally made the needed contact. Nonetheless, congradulations are in order.

FREE FREE FREE

15 meter 3 element mini beam and 10 meter beam driven element. Call Bob, WA4ZZN 834-1544 or 876-2204.

FOR SALE: Cush Craft AFM-4D, used, 2-meter repeaterant with boom, hardware, harness; new 50 ohm harness included can be side or mast mounted easily. Asking $50. 1 repeater and similar to the other one but with J-pole elements; used but in good condition with boom and 75 ohm harness asking $30. Contact Ed Alderman, WA4PEN 876-0340.

NOTICE

The FCC will be present on April 16 (Saturday) from 12:30 PM to 5:30 PM to give Technican and high class exams at the South Community Room at Crabtree Valley. Exams are by appointment only. Those interested must submit form 610 with a note attached indicating they will be present at above location to the FCC, Engineer in Charge, 870 North Military Highway, Norfolk, Va. by 4-12-77.

Then there was the old lady in the Ozarks who said, "They'll never get me into a airplane. Flying is against human nature. I'm going to stay here on the ground and watch television like the Good Lord intended me to."

Minutes of Meeting held

January 5, 1977

The regular monthly meeting of the Raleigh Amateur Radio Society was held in the South Community Room in Crabtree Valley Shopping Center on Wednesday, January 5. The meeting was called to order at 7:55 pm by President Chuck Littlewood, K4HF. Chuck introduced the club officers and welcomed visitors. There were 82 people in attendance and 73 signed the roster. Any member, full or associate, who pays the 1977 dues by the end of the February meeting will be eligible for a prize drawing. Annual dues for full members are $10 and for associate members (novice) $2.50.

Bob Corns, K4MC, reported news from ARRL and FCC. Bob is serving as chairman of the annual hamfest. Sign-up lists were available for volunteering for duties of the hamfest.

Jack Kenny announced that training classes will begin on the first Tuesday in February from 7 to 9 p.m. at Lions Park on Woodcrest. The 10 week Novice class will be followed by a 7 week general class. Additional information may be obtained from Jack by calling 876-0998.

Ham Cooper, WB4S22 is coordinating a project to build individual touch tone pads to function with the autopatch. The completed pads will be approximately $15.00.

Bob, K4MC, presented plaques to Dave Thomas, K4SAN, and Paul Thoburn, WB4MKY, for service to RARS as vice-president and treasurer respectively for the past two years.

Bert Bailey, W4FMN, made several announcements including that a SET exercise will take place on January 29 and 30. Sign-ups also were taken for assistance of communications for the inaugural ceremonies.

Bill McDowell, K4CIA, is coordinating a DX contest for RARS members. Ed Alderman, WA4PEN, made a report for the FM committee. The committee has sold the old repeater and has two antennas for sale. Ed led a discussion of the advantages of 220 MHZ communications.

A motion was made and passed to pay CVRA dues and also to take a small ad in the newsletter. Also a motion was made and passed to purchase a 220 MHz Clegg basic unit that could be adapted as a repeater unit for $139.00 and if the unit is not used after six months, it will be sold to a club member. A motion was made and passed to authorize up to $200.00 for completion of the new solid-state 2-meter repeater and autopatch.

Following the refreshment break, Tom Moody, W4MGR, won the opportunity to prepare an article for the newsletter and Austin Farrell, WA4RTR, won a new callbook.

Traffic from Crabtree during the Christmas season was 379 messages sent by the RARS and Cary clubs. Paul Thoburn, WB4MKY, presented a yearend treasurer's report.

Respectuflly submitted,

Jim Leatherwood, WA4BOV
Secretary of RARS

Jan 77 QST starts out with Part 1 of understanding ICs, not the logic or computer type, but linear. Instead of concentrating on simple Go-No-go, this IC functions as a linear amplifier and can be referred as analog ICs (I think). Lapsing back to the prosaic, QST brings in a lot of homebrews of divers types, e.g. a dip meter using the dual-gate MOSFET, RCA40673; a digital add-on clock to that homebrewing DVM/freq counter (just add 14 TTL ICs, linear that is, of course) a simple gated noise source circuit using 3 transistors and 9V battery to optimize a converter or receiver for best noise figure; a PCM generator that will get into microwaves real fast (Look out, ITT! We're coming thru!); controlling a repeater thru use of microprocessors and simple reprogramming to accomplish changes in modus operandi; reducing those power-line transients that QRM your QSOs by means of a Heathkit SBA 104-1 adaptable primarily to the SB303 but usable for other rigs with the usual simple (?) modifications; and a combination quad-yagi 20M radiator that packs it all into a 25'x25'x5' cube of free space. After rolling down the sleeves, you can even continue enjoying the issue by perusing Part 1 of OSCAR fundamentals (finding same, listening and enjoying), an eventful 1976 that saw ham radio expand in all directions, results of a Canadian Winter Rally (No tnx; NC's 15° was enough for me), and the usual regular features of our national organ. So QST has started off 1977 with a typically fine bundle of reading and brewing attractions that you just cannot ignore, unless you are a bore. Therefor.....73 fer now. FEB 77 CQ is thin but most timely. Ahead of the pack, as a matter of fact. Fine business. Good mush in '77, as they say in Alaska. One of the first articles spreads out reports from several QRP operators and may prove of great interest to those who see more to ham radio than flipping on the BIG SWITCH to chase off the competition in dogfighting DX. And then the piece-de-resistance. O ohms that is, a complete review of--drool, drool--Al's latest,--the Kenwood TS820. A true beauty. Even the CB thieves would love to wrap their greasy fingers around this ham gear. The knobs would fascinate them, something they could comprehend. As for the rest of the rig, read and drool again. It's all your,--------for $1000 plus or minus a few (options). Other readings include Part 1 of the multi-band trap; ham TV; nostalgia over such as the Gross CW25 transmitter (for $13.95!); building an alarm that will alert you to the power's going off (so you can reset that electric alarm or switch to manual, i.e. wind); and erecting a log-periodic quad array requiring only two high supports and 11 elements. Beginning electronickers will enjoy the articles on coax problems, operating an FM repeater, theory of SSB, and explaining PEP. As if this is not enough, CQ still has its regular features like George's Propagation Charts and Contest Calendar.

W4FMN

* *

REMEMBER RARS' SOP: IN TIME OF WAR, GET ON 04/64 AND 28.54

* *

ANSWERS TO LAST QUIZ:

1-77 Simply e_{out}/e_{in}

2-77 3 + j4

3-77 Uses only 1/5 the power

FEBRUARY QUIZ:

4-77 Doubling the physical length of a Hertz antenna causes what to the resonant frequency?

5-77 A 2000 ohm/volt voltmeter has how much resistance on the 0-100 volt range?

6-77 What type harmonics are cancelled out in the pushpull amplifier?

RARS NETS

Ten is picking up. But more customers are needed. Be sure to consider the advantages of coming in on 28.54. Good fellowship, preserving 10 for future hams (even for those who ignore it at present), and, generally, a static QRM free channel to conduct business, pass traffic and ragchew. WA4ENZ and WB4IOJ are charter members and guard the pass like Charybdis and Scylla (is my ancient Greek still holding up?) As for Two, it is still RFing along. Some of the NCSs get tired and may be late for their net but someone always grabs the mike and keeps the net functioning. It even passes traffic now and then. After trying to collect net data to report to QST or ARRL, I find now that it is easier and best to collect such data as I enter individual net sessions. So you NCS types keep this in mind and keep your NCS data handy when you check into the RARS Two Net. Remember that the RARS TWO operates every nite of the week now. So there's no excuse for not checking in more often and less occasional. Will get SOPs to each NCS as fast as I can reproduce them. In the meanwhile, just ape the THEN and the details will be substantially correct. Remember to take care of the mobiles and emergency power first, then the out-of-towners. Show Raleighite hospitality. In all cases that I can think of, traffic has priority. Keep it moving.
Hope to see ALL of you on Ten or TWO if not BOTH.....

W4FMN, Bert, EC Wake

A QRPP AMONG THE KW'S, OR,
The Voice that Crieth in the Wilderness

by Mike Everette, WA4DLF

Yes, that's right, I am doing an unassigned and unsolicited editorial for the RARS News. Why? Well, some things need to be said what ain't been yet.

Like just about all of us who are licensed, I received in the mail this week a sample copy of the new magazine Ham Radio Horizons. Putting it mildly, this was like a breath of fresh air after inhaling hydrogen sulphide fumes all day. Here for once is an entire publication telling the world (more specifically that portion of El Mundo involved in personal communications, either the genuine or the counterfeit) about the incredible world of Amateur Radio, and emphasizing that it is FUN! Every article in this journal is presented in that respect, including the technical ones. No "if you can't baffle 'em with brilliance befuddle 'em with excrement of male bovine" style super-futuristic avantgarde tech junk that 90% of us can't understand; no stodgy " ... it seems to US and therefore MUST seem to YOU" editorials from the Ivory Towers of AR^2L (I am a member so I can complain); no "to-hell-with-everybody-I-am-the-greatest-I-dare-the-FCC-to-get-me" like emanates under the pseudonym of Good (?) Numbers; and UP TO DATE news unlike the 6-months-behind-schedule-and-2-months-late-delivered endless trivia of The Last Magazine. No, indeed! Ham Radio is FUN and it is EXCITING! And it is a powerful force in the modern world: a force for friendship, enjoyment, self-improvement, public service.

I have one blatant criticism of this otherwise very fine effort. My criticism is likewise a glaring indictment of Amateur Radio. It is, simply, that too much emphasis is placed today on high-priced, super-modern-sophisticated gear in publication aimed at and read by beginners in our hobby. 75% of us can only afford to dream and perhaps drool over these rigs anyway. Even the so-called "lower-priced" stuff on the market today is priced far above the means of many younger would-be hams. Good, basic, sound, simple, low-cost gear, both receiving and transmitting, is not too common today, but can be bought new. Matric, for one, makes some fine little CW QRP rigs. But the ads are usually buried where they won't be seen. Even if they are ... well, "peer pressure" on the bands today is something to behold! Newcomers are made to feel that they aren't doing the right thing unless they jump in to buy at least a 500-watt SSB transceiver, so they "won't be left out" when the General license comes. They look at the prices

RALEIGH AMATEUR RADIO SOCIETY

BY-LAWS

REVISED DECEMBER 1976

We, the members of the Raleigh Amateur Radio Society, Inc., do hereby declare that the following rules and regulations, not inconsistent with the laws of the State of North Carolina and the Articles of Incorporation of this Society, shall be our governing law.

Section 1 - OFFICERS

This corporation shall have four officers which shall be named as follows:

1) President; 2) Vice President 3) Secretary 4) Treasurer

Each officer shall be eighteen (18) years of age or older and a "FULL" member of the Society. FULL members, as defined in the Articles of Incorporation, shall be duly licensed amateurs of one of the following grades who are admitted to membership: Extra, Advanced, General, Conditional, or Technician.

Each candidate for office in the society shall have been a member of the society for a minimum period of one year prior to his election to office OR one of the initial incorporators of the society. (Names of the initial incorporators appear in section 12 of the Articles of Incorporation.)

Exception - For all elections held in the year 1969 eligible candidates must have been either an incorporator or a Charter Member. (A Charter Member is defined as one who becomes a "FULL" member of the society within ninety (90) days of the date of Incorporation.)

a) Tenure of Office - Staggered Elections

The term of office for all officers of the society shall be two (2) years except that the term of office for the President and Secretary in the first year of operation (1969) shall be one (1) year. (Thus elections for a new President and Secretary shall be conducted in the month of November 1969 and every two years thereafter.) (Odd year elections.)

The Vice President and Treasurer shall be elected for two (2) year terms commencing in the second year of operation (1970) and for two (2) year terms at all succeeding elections. (Thus elections for the Vice President and the Treasurer, after the initial election in November 1970, shall occur in November 1972 and in the EVEN years thereafter.)

It shall be possible for a society officer to be nominated and elected to another office. For example, the Vice President might be nominated and elected to the office of President during the odd year elections. In this event, his former office shall be declared vacant subsequent to his election to his new office, and a special election shall be held to fill the remaining term of his former office.

b) Nomination and Election of Officers

Nominations for all offices in the society shall be submitted to the membership at the first regularly constituted business meeting in the month of October in the year in which the elections fall due. All nominations will be noted in the official minutes of the society by the Secretary. Elections by secret ballot shall be held at the first regularly constituted business meeting in the Month of November following the nominations. The newly elected officers shall be invested with the rank of office at a meeting of the membership in the month of December following, and shall assume the duties of office as of January 1 of the new year.

A majority of the FULL members present at a regular meeting shall be necessary to constitute a valid election of officers.

In the case of two candidates for the same office that candidate receiving the largest total vote shall be declared the winner. In the case of three or more candidates for the same office that candidate receiving a majority vote shall be declared the winner. If no one candidate receives a majority vote a runoff election shall be conducted between the top two candidates and the candidate receiving the largest total vote in the runoff election shall be declared the winner.

There shall be no restrictions as to the number of times (consecutively or otherwise) that a qualified member of the society may hold the same or another office in the society.

c) Actions to remove Officers

Any officer may be removed for just cause upon an affirmative vote for removal by 75% of the FULL voting membership in person. The Secretary shall notify all FULL members of the Society by mail of the action to be taken prior to the meeting at which the vote is to be taken.

d) Duties of Officers

1) President

The President shall preside at all meetings of the society, and shall conduct the same according to the rules adopted. He shall enforce due observance of the corporate Articles of Incorporation and By-Laws; decide all questions of order; sign

all official documents that are adopted by the society, and none other; and perform all customary duties pertaining to the office of President. He shall authorize and countersign all checks issued on the corporate accounts by the Treasurer.

2) Vice President

The Vice President shall assume all the duties of the President in the absence of the President, and shall, when so requested, aid the president in the performance of his duties.

3) Secretary

The Secretary shall maintain a post office box in the name of the society. He shall maintain a neat and accurate written record of the proceedings (preferably typewritten) at all meetings of the society (minute book) which shall be available for inspection at all times. He shall sign the official minutes after each meeting. He shall file and be responsible for answering all society correspondence. He shall maintain the corporate stationery and seal. He shall bring pertinent correspondence to the attention of the society at each meeting. He shall read the minutes of the preceding meeting at each new meeting and notify the entire membership of any special actions to be taken by the society. He shall generally perform all other appropriate duties which pertain to the secretary of the society.

4) Treasurer

The Treasurer shall maintain the corporate ledger in a neat and accurate fashion by the cash receipts method. It shall be open for inspection at all times. The Treasurer shall be responsible for maintaining the corporate bank accounts in a local bank of sound financial structure and good reputation in the community. He shall retain and file all cancelled checks of the corporation, all receipts of expenditures and shall issue receipts for dues paid by members upon request. He shall give quarterly financial reports to the membership (or more often upon request) and shall cause to be published an annual financial statement at the end of each year. He shall maintain a separate and accurate record of the entire membership of the society with addresses, telephone numbers, grade of license, class of membership in the society, and whether a member of ARRL. He shall be responsible for answering any inquiries or questionaires from Federal or State taxing authorities (this is imperative in order to avoid suspension of our corporate charter).

5) General

Each officer shall be responsible at the end of his term of office for turning over all records and items belonging to the society to his successor and to indoctrinate his successor as to the respective duties of his office.

e) Vacancy in Office

Any vacancy occurring in one of the corporate offices more than six (6) months before the end of the term for that particular office shall be filled by special election.

If vacancy occurs in one or more of the corporate offices with six (6) months or less left in the term for that office, the vacancy shall be filled as follows:

1) If the vacancy occurs in the office of president then the vice president, in addition to his own duties, shall assume the duties of that office.

2) If the vacancy occurs in the office of vice president then the president, in addition to his own duties, shall assume the duties of that office.

3) If the vacancy occurs in the office of secretary then the treasurer, in addition to his own duties, shall assume the duties of that office.

4) If the vacancy occurs in the office of treasurer then the secretary, in addition to his own duties, shall assume the duties of that office.

f) Issuance of Checks - Savings Account

Disbursements of amounts greater that twenty-five dollars ($25.00) shall be subject to approval by a majority of the FULL membership present at the meeting at which the vote is taken.

All corporate funds exceeding that required for operating expenses shall be transferred from the corporate checking account to a savings account to be opened by the treasurer.

Section 2 - DIRECTORS

This corporation shall have no less than three directors.

The initial board of directors, as listed in the Articles of Incorporation, consists of three members: Paul C. McLeod, Jr., Robert C. Workman, and William G. McDowell. The initial board shall serve until their successors are duly elected and qualified.

The officers of the corporation shall serve as directors of the corporation and the election of the corporate officers shall also constitute the election of those officers to the board of directors. In addition, the immediate past president shall serve as a member of the board of directors until replaced by his successor.

Additional directors may be nominated and elected to the board in the same manner as the election of officers.

Section 3 - REMOVAL OF MEMBERS

Any member may be removed for just cause upon an affirmative vote for removal by fifty-one percent (51%) of the FULL voting membership (in person-no proxies). Petitions for removal shall be submitted at any regularly constituted business meeting or special meeting, noted in the minutes, and a vote on removal taken at the next regularly constituted business meeting. The secretary shall notify all FULL members of the society by mail or telephone of the action before the meeting at which the vote is to be taken.

Section 4 - QUORUM TO CONDUCT BUSINESS

Ten percent (10%) of the FULL voting membership shall be present and considered a quorum.

Section 5 - AMENDMENTS TO THE BY-LAWS

Amendments to the By-Laws may be presented to the membership at any regularly constituted business meeting. The secretary shall note the proposed amendment in the official minutes and notify the FULL membership by mail of the action before the meeting at which the vote is to be taken.

The membership shall then vote on the proposed amendment at the next regularly constituted business meeting.

A majority vote in the affirmative of the FULL members present at a regular meeting shall be necessary to adopt the amendment.

Section 6 - MEMBERSHIP

Sixty percent (60%) of the entire membership of the Society shall be "FULL" members.

All persons interested in amateur radio shall be eligible for membership. (A person interested in amateur radio is defined as an individual interested in radio technique, good fellowship, and civic activity solely without personal aim and without pecuniary interest.) However, as stipulated in the corporate Articles of Incorporation, only FULL members (duly licensed amateurs of one of the following grades: Extra, Advanced, General, Conditional, or Technician) shall have the right to hold office in the society (if eighteen years of age or older), or the right to vote at meetings of the society on matters of business or policy.

Membership applications shall be accepted by the membership committee for consideration and approval before admission to the society.

Former members of the Wake County Amateur Radio Association, Inc. shall be automaticall eligible for the class of membership appropriate to the class of license held, and shall be granted membership upon payment of dues, without formal application to the membership committee.

Honorary membership shall be awarded to ;individuals by a majority vote of the FULL members present at a regular meeting. An Honorary member pays no dues and is entitled to all the privileges of FULL membership except voting.

Section 7 - DUES

The annual dues payable to the society by FULL members shall be ten dollars ($10.00). In the event that two (2) or more FULL members of the society should be related by blood or marriage and reside in the same household, dues shall be charged at the following rate: dues for the first member shall be ten dollars ($10.00) per annum; dues for each additional member (related by blood or marriage and residing in the same household) shall be two dollars and fifty cents ($2.50) per annum.

The annual dues payable to the society by ASSOCIATE members (including Novice class licensees) shall be two dollars and fifty cents ($2.50)

New members shall pay their dues in full upon admission to the society. Dues for all classes of membership in the society shall fall due on the first day in January of each year. FULL members joining the society at times other than January of any year shall pay dues at the rate of ten dollars ($10.00) per year or one dollar ($1.00) per month for the remainder of the membership period (i.e., until January of the following year), whichever is less. ASSOCIATE members joining the society at times other than January of any year shall pay dues at the rate of two dollars and fifty cents ($2.50) per year or twenty-five cents (25¢) per month for the remainder of the membership period, whichever is less. New members, upon payment of dues, shall be issued a membership card by the Treasurer.

Associate members who become eligible for "FULL" membership in the society shall be considered "FULL" members until the subsequent January 1 without additional payment of dues.

All dues must be paid within thirty (30) days (grace period) of their due date. Failure to pay dues within the grace period shall cause automatic suspension of the membership of the nonpaying member. However, payment within ninety (90) days of the due date shall cause said individual to be reinstated to membership without having to make new application. The membership committee shall have the authority to waive these time limitations in cases of absence from the city or state, illness or other hardship if in their discretion such action

is merited. It shall be the duty of the treasurer to bring to the attention of the membership the fact that the due date has arrived.

Section 8 - CONDUCT AT MEETINGS * ROBERT'S RULES OF ORDER

Robert's Rules of Order (Revised) shall govern proceedings of the society in all cases to which they are applicable and in which they are not inconsistent with the Articles of Incorporation or the By-Laws of the society.

Section 9 - COMMITTEES

a) Executive and Advisory Committee

The Executive and Advisory Committee shall consist of the Board of Directors and such members as they shall appoint to this committee. The Executive and Advisory Committee shall have broad powers to plan society activities and to conduct society business except for those items of business reserved for the FULL membership by the By-Laws of the Society. All meetings of this committee shall be announced at regularly constituted business meetings of the society and in the society newsletter, and shall be open to any member.

b) Membership Committee

The Treasurer will normally serve as the chairman of the Membership Committee. The duties of the membership committee are described elsewhere in these By-Laws. The Executive and Advisory Committee may appoint members to the membership committee in addition to, or in lieu of, the Treasurer.

Section 10 - ARRL AFFILIATION

Affiliation with the American Radio Relay League, Inc. will be commenced as soon as the society can qualify. Affiliation with the League shall continue perpetually as long as the society meets and upholds the qualifications. However, League membership is not a requirement for membership in the society.

Section 11 - SOCIETY PARTICIPATION IN POLITICAL ACTIVITIES FORBIDDEN

The society as an organized body shall not participate or intervene in any political campaign on behalf of any candidate for public office.

No part of the assets or income of the corporation shall be distributed to or inure to the benefit of any member, director or officer of the corporation or any private individual.

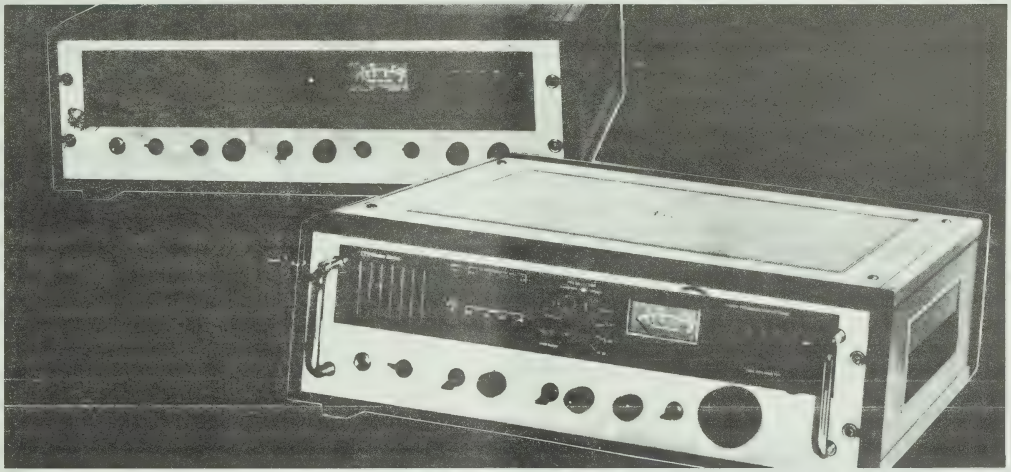
However, reasonable compensation may be paid for services rendered to or for the corporation affecting one or more of its purposes.

Section 12 - SUGGESTED ORDER OF BUSINESS FOR REGULAR MEETINGS

1) Meeting called to order by the President
2) Minutes of previous meeting read by the secretary, if requested
3) Correspondence reported by secretary- Motions arising out of correspondence may be taken up immediately or held over for new business.
4) Report of Executive and Advisory Committee, if any
5) Report of Treasurer if due or requested
6) Committee reports
7) Unfinished business
8) New business
9) Program, if there is one
10) Adjournment by the President

an extraordinary combination of digitally synthesized receivers...

each with built-in capacity to satisfy a broad spectrum of singular applications.



ITT Mackay Marine 3020A and 3021A Radio Receivers feature solid state construction, dual conversion and super-heterodyne design providing continuous frequency coverage from 15kHz to 29.9999MHz. Frequency selection is accomplished by step tuning, while the 3021A Receiver uses sweep tuning. These receivers meet strict requirements of British MPT, German FTZ, Norwegian NTA, Dutch and Spanish PTT and Canadian DOC, and can be used wherever maximum reliability and ease of maintenance are required.

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ITT *Mackay Marine*

and realize they can't ever afford such, and drop out because "ham radio's a rich man's hobby." They go to hamfests and don't know good bargains when they see them because old standbys like the Viking Ranger, Elmac AF67, Hallicrafter SX-71, and the famous Command Set have been represented to them as "junk" because they aren't "state of the art." Migawd, today a vacuum tube is anathema!

"State-of-the-art" ... I've heard that bit of Pure B.S. until I'm sick of it. God gave Moses ten commandments' the ARRL felt obliged to add six more, called "The Amateur's Code." Number three: The Amateur Is Progressive. Yeah, BUT.....ain't it just possible that one novice learning to work with radio gear by building a three-tube re-jenny receiver and two-bottle 15 watt xmitter, crystal controlled, handwound coils and all, is JUST AS MUCH fulfilling the ARRL's (and George Hart W1NJM's) exalted notions of PICON ("Public Interest, Convenience or Necissity" another orbital circularity concept) as the almighty NTS nets grinding on night after night? Whigh we ALL, naturally, must be part of to preserve the true essence of hamdom? Sure! Perhaps more so! That novice is accomplishing something, and he's HAVING FUN. It doesn't matter a bit what kind of gear you use ... not its age, beauty (or lack thereof)... as long as you enjoy ham radio. The point is, do not be bugged by the fact that the Super Zot Ray CXDXTR2001 everyone else uses and says you "ought to" is beyong your reach. Do not fret that your homebrew rig does not contain 275 TTLCMOSSchottkydigital IC's and uses one fundamental crystal for frequency control rather than a one-million-channel-VXO-phaselock synthemasizer. Don't begrudge your slide-rule or self-scribed notebook-paper dial because it ain't got MAN3LEDdigital one picocycle readout. And what's wrong with vacuum tubes? So they put out some heat? Is that such a criminal waste? Most hamshacks I've been in were inside garages or back porches or utility rooms which could've used a little more warmth! Besides the heat dries out moisture in the rig. Take THAT, you BS-EE and Ph-Dd's!!!!

I feel like I have room to talk, gripe, or whatever. I've been into hamming from the most basic minimum rig to the most advanced stuff short of a Signal One... and I'm convinced basic is more fun. Been licensed for 16 years... 9 as an Extra. Lots of things have happened in hamming over that time. But the thing I regret the most is the trend toward "conformity" which I've jousted at herein. Plus the fact that even us oldtimers (ME? AGGGH!) tend to forget how much FUN we have perhaps had... often with "simple pleasures." "Tis a gift to be simple, tis a gift to be free, tis a gift to come down where we ought to be ....."

AR

FROM JERRY SHORE

After my many years of struggle at NCSU, I have finally graduated and started to work for an engineering company. I regret leaving my friends in Raleigh and would enjoy hearing from you. My new address is:

Jerry Shore
17700 Towne Crest Drive
Apartment 201
Gaithersburg, Maryland 20760

Since some of you may be interested in using the National LM 373 IF amp/detector IC, I have included some comments that may be interesting.

Looking under "Typical SSB Performance" on the data sheet, the audio output voltage is listed as 60 mV for an e_{in} of 100 mV (e_{in} appears to be V_{3-4} from analogy from "Video Characteristics" table parameter Second Section Output Swing). This appears to give the gain of the second section and product detector as 20 log $\frac{80 \times 10^{-3}}{100 \times 10^{-3}}$ or -1.9 db for SSB mode.

This seems to indicate that the second stage and product detector have a combined "gain" of much less than I assumed from the "Super-Simple 80-20 Receiver" described in April 72 QST. In that receiver the author used only a mixer, LM 373, audio stages, VFO, buffer, and BFO stages.

I would suggest that a receiver of this sort would need much more gain before the LM 373.

Comments would be appreciated.

73,
Jerry Shore
WA4IOW/4

INSTANT UPGRADE IS HERE!!!

--

Kiernan "Doc" Holliday

--

WB4LGE

--

The next time you travel all the way to Norfolk and pass an upgrade test, you will not have to wait until the next ice age to use your new priveleges. Effective March 1, the engineer-in-charge of the District Office will issue you an Interim Amateur Permit, complete with distinctive call sign suffix, so you can get on the air.

Apparently the district office does not have to issue the permit immediately, but merely as soon as possible. That means you probably will not take it home with you.

The permit will be good for 90 days and will only be issued to those already holding an Amateur License.

42 Fed Regis 3166

FCC OBFUSCATES THE OBVIOUS

--

Kiernan "Doc" Holliday

--

WB4LGE

--

The Amateur and Citizens Division has recently undergone reorganization so FCC decided to change the name: Now we are Administered by the Personal Radio Division.

I suppose that changeis a good thing, but the old name was direct, people knew what it was. Now they want to hide us!

Oh well.....!

42 Fed Regis 3166

JIMMY CARTER'S BICENTENNIAL RELAY (Credited HR Report January 14, 1977 Number 131)

Jimmy Carter's Bicentennial Relay messages were received at Blair House, Washington, Wednesday by Fran Voorde, his Appointments Secretary. Two key Bicentennial Commission officials joined K4MN, Foundation for Amateur Radio, W9CI, originator of the 1976 Relay, Ethel Smith, QCWA and Vic Clark, ARRL for the ceremony. President-Elect Carter has promised a response next week.

NOTE!!!!

Several people have submitted articles for the Newsletter which todate have not been used. Please do not dispair. We have had to shorten the Newsletter for two months to allow for inserts (Do not want to exceed the weight limits).

ARRL NEWS

Congrats to the Crabtree Mall traffic gang. 379 pieces of traffic originated. Both Cary (WA4OSS) and Raleigh (W4DW) made BPL for originating traffic in December.

The FCC issued a notice on January 10 announcing instant upgrading program. Effective March 1, FCC offices will be delegated authority to issue interim permits to applicants who pass a higher class of license. Briefly, this means when you walk out of the FCC office you can use what you just passed. Rit now, that is.

The new docket announcing the FCC proposals for the WARC 79 conference on frequency use has been issued. The ARRL committee working on the docket say this conference will be biggest thing that will happen to amateur radio for many many years. The committee points out that whatever facet of ham radio you use or have an interest, the frequencies for that interest is covered by this conference. Everyone is asked to write and ask that the frequencies you use by retained or expanded. A complete frequency chart of the FCC proposals will be in an upcoming QST. Read it.

Pass the word along about the Novice and Upgrading classes which will begin Tuesday nights at 7:00 PM at Lions Park. There is a lot in interest. A fellow told me this week that he had been looking for a class on upgrading for over a year. Just shows that we are keeping our light under that old basket.

K4MC

I

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DXPEDITIONS

By now RARS DXers should be well on their way to the century mark - upcoming DX contests will, no doubt, prove useful in adding some new ones. Keep swinging and good luck!!

UPCOMING DXPEDITIONS

Bouvet - High hopes for operation in late January by LA3CC. 20 Meter CW best bet - Calls 3Y1VP or 3Y3CC.

Manihiki - This spring by ZK1BA possibly April.

Portuguese Guinea - CR3 to be active in February - by SMØAGD.

Saudi Arabia - HZ1AB latest activity by WB9FUV & WA4GFC. Putting up tribander - should be QRV in contests.

Easter Island - CEØAE should be active on 160 by now.

Western Samoa - W9MR to be active from February 3. Hopes to hit ZM7, ZK2, Lord Howe & DV. 14025 and 14195 freq.

TIDBITS

160 METER NEWS

S79P - 1827 from 0130-0230Z
OH2BM - 1826 from 0630Z
YU1PCF - 1827 - 05 to 0630Z
HB9RM - 1828 - 06Z
PAØJIP - 1829 - most any time in evening
SVØWZ - 3594 around 05Z - QSX 3808
3J1NR/5N2 - 14003 at 16Z
FR7A1/E - 14026 at 17Z
9G1JN - 14225 at 1200Z
TJ1BB - 14215 at 16Z
7P8BC - 14333 at 18-1830Z
FB8XC - 14025 at 0230-04Z
VK9RH - Norfolk - QRV 20 CW.

QSL INFORMATION

CT4AT via W1JFL
VP5CNL via W8CNL
PJ8KG via YASME
EL2R via WA4HHG
JW7FD via LA5NM
PJ8CO via K1CO
VKØac via VK2ZQK
7P8BC via WA9SMM
VP8MS via K4MZU
HZ1AB - HDQTRS USMTMSA
ATTN: J-6
APO NY 09616
HKØCOP - BOX 622 SAN ANDRES
9K2DR - P O BOX 2 KUWAIT
VP2LDV - 4511 TREEHOUSE LAND #B
FT. LAUDERDALE FL 33319
VE2AQS/TG9 - BOX 115
GUATEMALA CITY

-- New prefix for Seychelle Islands is S79
-- KV4AA (AJ3AA) made 35,306 QSO's during the Bicentennial Year - QSL Manager WA6AHF will need a big shovel!
--Special congratulation to Ken, WA4JJW of Wendell on acheiving his DXCC. Who in RARS will be next?

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Tell'em Bill, WB4AXH, sent you!!

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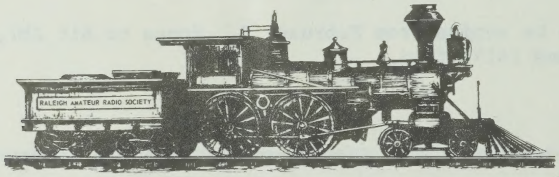
8:00 P.M. - 146.04/146.64 Repeater
RARS 10 METER SSB NET - Monday, Tuesday, Thursday, Friday Nights
7:00 P.M. - 28.540 MHz



SHERMAN STARNES
ROUTE 1, BOX 99
FRANKLINTON, NC 27525

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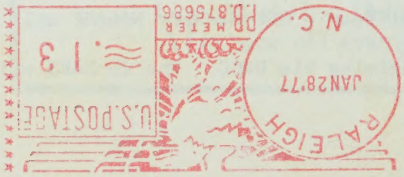
RALEIGH, NORTH CAROLINA 27609



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